Title: Pre-Hospital Treatment of Organophosphate Poisonings: Guidelines and Clinical Effectiveness

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Research question:

1. What treatments are available in Canada for pre-hospital treatment of organophosphate poisonings?
2. What are the guidelines for pre-hospital treatment of patients with organophosphate poisonings?
3. How many organophosphate poisonings occur in Canada?

Methods:

A limited literature search was conducted on key health technology assessment resources, including PubMed, the Cochrane Library (Issue 2, 2007), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI, EuroScan, international HTA agencies, and a focused Internet search. Results include articles published between 2002 and the present, and are limited to English language publications only. Filters were applied to limit the retrieval to systematic reviews/HTA, economic, randomized controlled trials, and observational studies. Internet links are provided, where available.

Results:

The results are listed below and additional references of interest are included in the attached appendix. No relevant health technology assessments were identified in the literature search. No information was found on the number of organophosphate poisonings in Canada. Please note that not all documents listed in this report specify if treatment is pre-hospital.
Health technology assessments

No literature identified

Systematic reviews and meta-analyses


Randomized controlled trials


Observational studies


Guidelines and recommendations


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Appendix – Further information:

Review articles

1. Nishijima DK, Wiener SW. Toxicity, Organic Phosphorous Compounds and Carbamates. In: 

2. Goel A, Agganwal P, Bhoi S, Gupta V. High-dose pralidoxime for organophosphorus 

3. Peter JV, Moran JL, Graham PL. Advances in the management of organophosphate 

4. Quail MT, Shannon MW. Pralidoxime safety and toxicity in children. Prehosp Emerg Care 

5. Organophosphorous Poisoning [web site]. In: Patient UK. Leeds, United Kingdom: Egton 
   (accessed 2007 Nov 20).

6. Katz KD, Brooks DE, Furtado MC, Chan L. Toxicity, Organophosphate [web site]. In: 
   eMedicine [database online]. New York: WebMD; 2006. Available: 
   Note: Includes information on frequency of poisonings in the US.

   2006;368(9553):2110-1. PubMed: PM17174692

8. Cherian MA, Roshini C, Peter JV, Cherian AM. Oximes in organophosphorus poisoning. 
   5229;year=2005;volume=9;issue=3;spage=155;epage=163;aulast=Cherian. (accessed 2007 
   Nov 20).

   PM14664766

    Flomenbaum NE, Lewin NA, Howland MA, Hoffman RS, Nelson LS, eds: Goldfrank’s 

Additional references

   Dorado County, Emergency Medical Services Agency; 2007. Available: 
   http://www.co.el-
   Note: See “Atropine sulfate” p. 5, 41; “Pralidoxime” p. 43

2. VIHA IV Monograph: pralidoxime [web site]. In: Vancouver Island Health Authority. 
   Vancouver, BC: Vancouver Island Health Authority; 2007. Available: 
   http://www.viha.ca/VR/rdonyleas/46C36BE4-C6DD-4B42-B4BB-


   *Note:* See section, “How is overexposure to malathion treated,” p. 81